UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

SUBJECT:	CLEAN AIR ACT INSPECTION REPORT Magellan Midstream Partners, L.P., Alexandria, Minnesota
FROM:	Veronica Fischer, Environmental Engineer AECAB (MI/WI)
THRU:	Sarah Marshall, Section Supervisor AECAB (MI/WI)
TO:	File

BASIC INFORMATION

Facility Name: Magellan Midstream Partners, L.P.

Facility Location: 709 3rd Avenue West, Alexandria, Minnesota

Date of Inspection: July 14, 2022

EPA Inspector(s):
1. Veronica Fischer, Environmental Engineer
2. Constantinos Loukeris, Environmental Engineer

Other Attendees:
1. Troy Foth, Area Supervisor
2. Josh Steidl, Operator
3. Justin Benge, Operator

Contact Email Address: troy.foth@magellanlp.com

Purpose of Inspection: Tanks inspection

Facility Type: Tank farm

Regulations Central to Inspection: NESHAP BBBBBB – Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities; NSPS Kb – Volatile Organic Liquid Storage Vessels

Arrival Time: 9:55 AM CST
Departure Time: 12:30 PM CST

Inspection Type:
☐ Unannounced Inspection
☒ Announced Inspection

OPENING CONFERENCE

☒ Presented Credentials
☒ Stated authority and purpose of inspection
☒ Small Business Resource Information Sheet not provided. Reason: Not a small business.
☒ Provided CBI warning to facility

The following information was obtained verbally from facility personnel unless otherwise noted.

Process Description:
Magellan Midstream Partners, L.P. (Magellan) owns and operates a liquid petroleum bulk storage terminal in Alexandria, Minnesota, known as the Alexandria Terminal. The Alexandria Terminal has approximately 26 products tanks, 8 of which are gasoline storage tanks, and one tank truck loading rack with 3 loading spots. A description of each tank's date of construction, dates of last API 653 inspection, floating roof design, and other information is located in Attachment A. This attachment was provided by Magellan after the inspection.

Staff Interview:
The loading rack has a vapor collection and combustion system. The combustor is used as a relief system for overpressure of the incoming vapor line. Floating roof tank seals are inspected visually through the roof hatch. The facility does not perform any lower explosive limit (LEL) monitoring unless it is needed to safely perform maintenance activities.

TOUR INFORMATION

EPA Tour of the Facility: Yes

Data Collected and Observations:
EPA toured the facility and performed optimal gas imaging with a FLIR® camera. The FLIR® camera was used to identify hydrocarbon emissions from tank vents, roof hatches once opened, and the loading rack and associated drains. A record of videos taken using the FLIR® camera is located in Appendix A to this report. Tank 1343 was actively receiving gasoline at approximately 2,200 barrels per hour (bph) while the FLIR® video was being recorded. Tank 4010 was actively pumping out gasoline at approximately 450 bph while the FLIR® video was being recorded.

EPA monitored the %LEL concentration of hydrocarbon vapors in the vapor space between the fixed roofs and floating roofs using a 4-gas detector. A record of the readings observed using the 4-gas detector is located in Appendix B to this report.

Photos and/or Videos: were taken during the inspection.

Field Measurements: were taken during this inspection.

- 4-gas detector readings

CLOSING CONFERENCE

☒ Provided U.S. EPA point of contact to the facility

Requested documents:

- For all internal floating roof tanks and geodesic covered external floating tanks the following information was requested:
    a. Installation date;
    b. If the tank is a breakout tank;
    c. Current rim seal types for every primary and/or secondary seal, if present. (e.g. mechanical shoe, rim mounted, etc.);
    d. Current floating roof design (e.g. pontoon, aluminum, etc.);
    e. Dates any secondary seals were added or removed including whether it was removed or added;
    f. Dates of the last internal floating roof and/or seal replacements including the type of the internal floating roof/seal that was installed before and after; and
    g. Date when the unslotted guide pole was replaced with a slotted guide pole or was modified to include slots.
- The regulatory applicability for each tank (e.g. NSPS Kb, NESHAP BBBBBB, etc.) and compliance option within each standard as it applies.
    a. Information relating to any change of compliance option.
- The date of the last API 653 inspection and a list of any work completed as a result of the API 653 inspection.
- Date the vapor hose/camlock assembly in each loading rack bay was last replaced.
- How Magellan operates and maintains the drains located at the loading racks.
- Most recent stack testing completed for each combustor.

Concerns:
EPA discussed the hydrocarbon emissions identified from some of the storage tanks as a possible indication of issues with the floating roofs. EPA was also concerned about the 12 ppm CO reading in the vapor space of Tank 685.

DIGITAL SIGNATURES

Report Author: VERONICA FISCHER

Digitally signed by VERONICA FISCHER
Date: 2022.09.09 08:22:42 -05'00'

Section Supervisor: SARAH MARSHALL

Digitally signed by SARAH MARSHALL
Date: 2022.09.09 08:32:10 -05'00'

APPENDICES AND ATTACHMENTS

1. Attachment A: Tank Details, Inspections and Other Information
2. Appendix A: Digital Image and Video Log
3. Appendix B: 4-gas Detector Readings

Facility Name: Magellan Midstream Partners, L.P.
Facility Location: 709 3rd Avenue West, Alexandria, MN
Date of Inspection: July 14, 2022

ATTACHMENT A: TANK DETAILS, INSPECTIONS AND OTHER INFORMATION

Facility	Tank Identification	Date of Construction (a)	Breakout Tank (Y/N (b)	Date of last API653 Inspection	Floating roof Design (d)	Date of seal or roof replacements (f)		Guide Poles (g)					Primary Seal (c)		Secondary Seal (c & e)		
						Seal	Roof	Number	Slotted/ Unslotted	Date Installed	Slots Added (Y/N)	Modification Date	Type	Date of Installation	Type	Date of Original Installation	Replacement Dates
Alexandria	429	1946	Y	2012	Aluminum	2010	2010	1	Slotted	2010	N	N/A	Wiper	2010	N/A	N/A	N/A
Alexandria	559	1946	Y	1998	Aluminum	2010	2010	1	Slotted	2010	N	N/A	Wiper	2010	N/A	N/A	N/A
Alexandria	684	1946	Y	2013	Aluminum	2013	1982	1	Slotted	1982	N	N/A	Wiper/ Wiper	1982/ 2013	N/A	N/A	N/A
Alexandria	685	1946	Y	1998	Aluminum	1982	1982	1	Slotted	1982	N	N/A	Wiper	1988	N/A	N/A	N/A
Alexandria	686	1946	Y	2000	Aluminum	2000	1982	1	Slotted	1982	N	N/A	Wiper/ Wiper	1982/ 2000	N/A	N/A	N/A
Alexandria	687	1946	Y	2001	Aluminum	2015	1982	1	Slotted	1982	N	N/A	Wiper/ Wiper	1982/ 2015	N/A	N/A	N/A
Alexandria	1343	1950	Y	2010	Aluminum	2010	1982/2010	1	Slotted	1982	N	N/A	Wiper/ Wiper	1982/ 2010	N/A	N/A	N/A
Alexandria	1344	1950	Y	1999	Aluminum	2017	1982	1	Slotted	1982	N	N/A	Wiper/ Wiper	1982/ 2017	N/A	N/A	N/A
Alexandria	1347	1950	Y	1999	Aluminum	2014	1982	1	Slotted	1982	N	N/A	Wiper/ Wiper	1982/ 2014	N/A	N/A	N/A
Alexandria	1348	1950	Y	2002	Aluminum	1982	1982	1	Slotted	1982	N	N/A	Wiper	1982	N/A	N/A	N/A
Alexandria	4010	1978	Y	1998	Steel Pan	1978	1978	1	Slotted	*1978	N	N/A	Mechanical Shoe	1978	N/A	N/A	N/A
*Assumed to be slotted at time of installation based on available records																	

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APPENDIX A: DIGITAL IMAGE LOG

1. **Inspector Name:** Veronica Fischer	2. **Archival Record Location:** OneDrive

Image Number	File Name	Date and Time (incl. Time zone and DST)	Latitude and Longitude	Description of Image
1	MOV_2742.mp4	July 14, 2022, 11:13 AM	N/A	Emissions from drain on loading rack spot 3
2	MOV_2743.mp4	July 14, 2022, 11:31 AM	N/A	Emissions from Tank 687 vents
3	MOV_2744.mp4	July 14, 2022, 11:33 AM	N/A	Emissions from Tank 687 vents
4	MOV_2745.mp4	July 14, 2022, 11:38 AM	N/A	Emissions from Tank 687 roof hatch
5	MOV_2746.mp4	July 14, 2022, 11:54 AM	N/A	Emissions from Tank 685 vents
6	MOV_2747.mp4	July 14, 2022, 11:55 AM	N/A	Emissions from Tank 685 vents
7	MOV_2748.mp4	July 14, 2022, 11:56 AM	N/A	Emissions from Tank 685 vents
8	MOV_2749.mp4	July 14, 2022, 12:11 PM	N/A	Emissions from Tank 684 vents
9	MOV_2750.mp4	July 14, 2022, 12:12 PM	N/A	Emissions from Tank 684 vents
10	MOV_2751.mp4	July 14, 2022, 12:14 PM	N/A	Emissions from Tank 684 vents
11	MOV_2752.mp4	July 14, 2022, 12:33 PM	N/A	Emissions from Tank 1344 vents
12	MOV_2753.mp4	July 14, 2022, 12:34 PM	N/A	Emissions from Tank 1344 vents
13	MOV_2754.mp4	July 14, 2022, 12:35 PM	N/A	Emissions from Tank 1343 vents
14	MOV_2755.mp4	July 14, 2022, 12:37 PM	N/A	Emissions from Tank 1343 vents
15	MOV_2756.mp4	July 14, 2022, 12:39 PM	N/A	Emissions from Tank 1343 vents
16	MOV_2757.mp4	July 14, 2022, 12:46 PM	N/A	Emissions from Tank 4010 vents
17	MOV_2758.mp4	July 14, 2022, 12:50 PM	N/A	Emissions from Tank 1347 vents
18	MOV_2759.mp4	July 14, 2022, 12:53 PM	N/A	Emissions from Tank 1347 vents
19	MOV_2760.mp4	July 14, 2022, 12:56 PM	N/A	Emissions from Tank 1348 vents

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Image Number	File Name	Date and Time (incl. Time zone and DST)	Latitude and Longitude	Description of Image
20	MOV_2761.mp4	July 14, 2022, 12:58 PM	N/A	Emissions from Tank 1348 vents
21	MOV_2762.mp4	July 14, 2022, 1:00 PM	N/A	Emissions from Tank 1348 vents

APPENDIX B: FIELD MEASUREMENT DATA

Location	LEL (%)	Carbon Monoxide (ppm)
Tank 685	8	12